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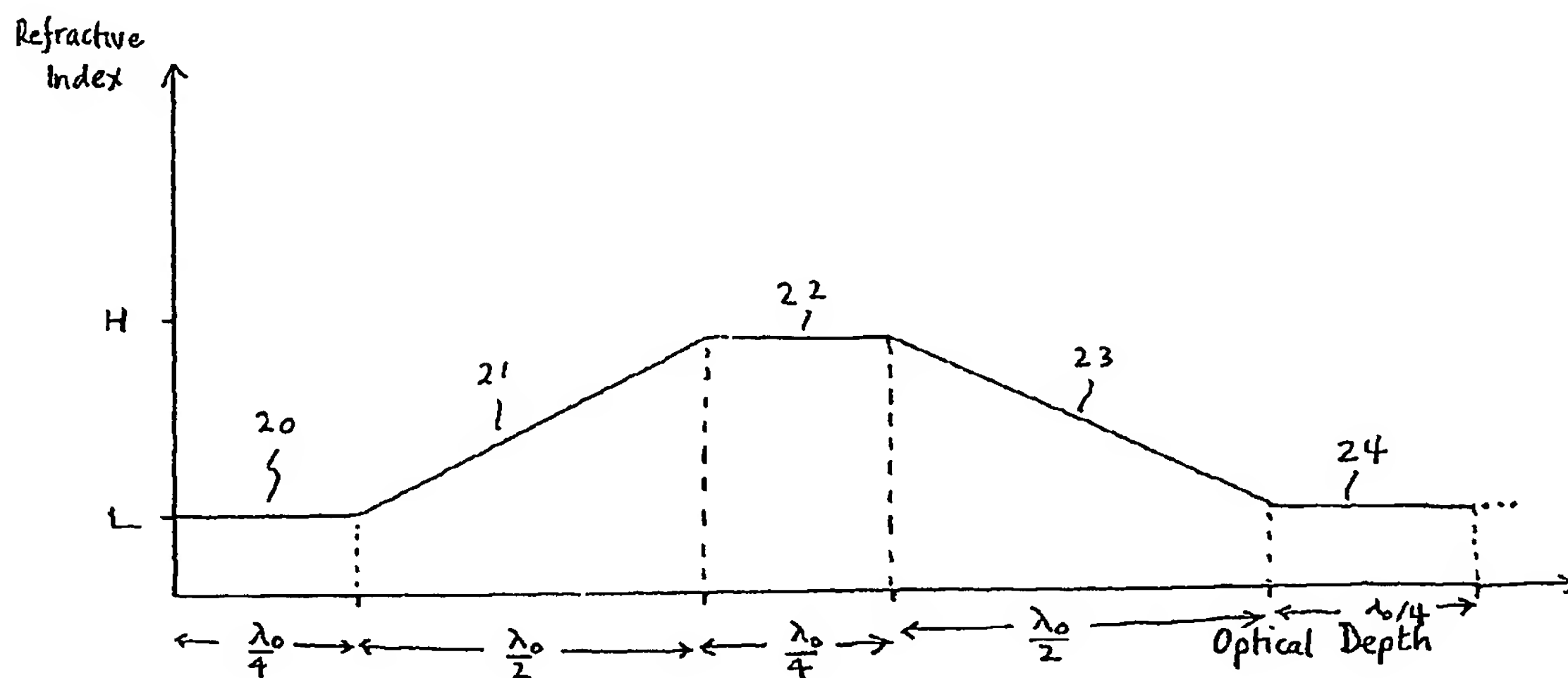
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(54) Title: AN OPTICAL FILTER



(57) Abstract: An optical filter including a substrate having a plurality of layers of materials stacked upon it, each of which materials is formed from one or both of : a first material having a first index of refraction; and a second material having a second index of refraction being less than the first index of refraction; wherein the plurality of layers of materials include a first layer and a second layer each formed from an inhomogeneous mixture of said first material and said second material; and a third layer formed from the first material being stacked in between the first layer and the second layer; wherein the optical thickness of the first and the second layer is $2Q$, and the optical thickness of the third layer is Q , where Q is the thickness of a given said layer traversed by one quarter of a common reference wavelength, and wherein all variations in the index of refraction of the first and second layer increase that index of refraction as the depth of the respective layer increases from regions thereof remote from said third layer to regions thereof proximate the third layer.

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